

REMARKS

Claims 1-24 are pending and stand rejected. Claims 1, 12, and 22 are amended by way of this amendment to clarify the subject matter of the invention. All pending claims, as amended, are believed to be allowable over the references cited by the Examiner as discussed below. Accordingly, a Notice of Allowance for the present application is respectfully requested.

Specification

The disclosure was objected to by the Examiner as Summary of the Invention. However, it is believed that the Summary of the Invention is not required as both 37 CFR 1.73 and MPEP 608.01(d) use the term “should” rather than “must” in connection with the Summary of the Invention. Thus it is believed that Amendment to the Specification is not required.

Claim Objections

Claim 1 is objected to because claim 1 line 2 discloses “IP” as an abbreviation. Claim 1 is amended to replace “IP” with “IP (Internet Protocol)” as suggested by the Examiner.

Rejection Under 35 U.S.C. §102(e)

Claims 1, 4-8, 12, 15, 16 and 18 were rejected under 35 U.S.C. § 102(e) as being anticipated by Le Gouriellec et al. (U.S. Pub. 2003/0112756).

Independent claim 1, as amended, generally recites a method for providing committed access rate (CAR) that generally includes classifying each received packet into a quality of service (QoS) group using information in a header, measuring and checking a traffic rate profile of the received packet against a corresponding SLA, marking the packet (1) as an in profile packet if the CAR packet is within the corresponding SLA so that the CAR packet receives congestion-free service or (2) as an out of profile packet if the CAR packet exceeds the SLA and is provided with best effort service, and performing packet buffer memory reservation to guarantee memory space for in profile CAR packets.

Independent claim 12, as amended, generally recites a network device for providing committed access rate (CAR), that generally includes a control pipe configured to classify each received packet in an IP/Ethernet network into a quality of service (QoS) group using information in a header, to measure and check a traffic transmission rate profile of the received

packet against a corresponding SLA, to mark the packet as one of an in profile packet and as an out of profile packet, and to perform packet buffer memory reservation to guarantee memory space for in profile CAR packets and to provide best effort service for out of profile CAR packets, a transmit queue, and a packet buffer memory configured to receive and store received packets.

In contrast, Le Gouriellec polices traffic “to ensure that traffic that exceeds the LSP's conditional bandwidth is dropped.” (See, Abstract). In particular, Le Gouriellec provides a queuing mechanism at each node where each node maintains a queue with a first area reserved for periods of congestion and a second area reserved for periods of no congestion. When congestion is encountered, unmarked traffic is stored in the first area and marked traffic is *discarded*, rather than provided with best effort service.

Le Gouriellec employs marker 44 to mark a packet based on the results of the classification and metering information. (Paragraph [0033]). Further, as the Examiner noted, Le Gouriellec provides that all traffic above the CR (committed rate) but below CR+ER (excess rate or subscribed conditional bandwidth; see paragraph [0025]) is marked to be dropped in case of congestion. (Paragraph [0037]). Thus, in contrast to the amended claims, once a packet marked, Le Gouriellec does not provide best effort service when congestion is encountered.

In view of the foregoing, withdrawal of the rejection of independent claims 1 and 12 as well as claims dependent therefrom under 35 U.S.C. §102(b) is respectfully requested.

Rejections Under 35 U.S.C. §103

Claims 9, 10, 19 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Le Gouriellec. Claims 2, 3, 13 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Le Gouriellec in view of Li et al. (U.S. Pub. 2007/0086337). Claims 11 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Le Gouriellec in view of Chen et al. (U.S. Pat. No. 6,226,685).

However, dependent claims 2, 3, 9, 10, 13, 14, 19, and 20 are believed to be allowable at least because the independent claims 1 and 12 from which they variously depend are believed to be allowable as discussed above. Withdrawal of the rejection of these claims under 35 U.S.C. §103(a) is respectfully requested.

Claims 22-24 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Le Gouriellec in view of Chen.

With respect to independent claim 22, the same or similar arguments presented above with reference to independent claims 1 and 12 Le Gouriellec apply to claim 22.

Specifically, independent claim 22 is amended to recited a method for providing CAR that generally includes classifying each received packet into a QoS group using information in a header, for a multicast packet, measuring and checking a multicast traffic rate profile of the received multicast packet using a corresponding multicast packet counter, for a CAR packet, measuring and checking a traffic rate profile of the received CAR packet against a corresponding SLA, marking each CAR and multicast packet as an in or out of profile packet, for each in profile packet, pushing out queued non-CAR packet if at least one of corresponding packet buffer memory and transmit queue is full, for each out of profile packet, providing best effort service; and queuing CAR packet into transmit queue memory.

In contrast, Le Gouriellec does not disclose or suggest providing best effort service for non-CAR packets as generally claimed in claim 22.

Withdrawal of the rejection of claims 22-24 under 35 U.S.C. §103(a) is respectfully requested.

CONCLUSION

Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

In the unlikely event that the transmittal letter accompanying this document is separated from this document and the Patent Office determines that an Extension of Time under 37 CFR 1.136 and/or any other relief is required, Applicant hereby petitions for any required relief including Extensions of Time and/or any other relief and authorizes the Commissioner to charge

the cost of such petitions and/or other fees due in connection with the filing of this document to
Deposit Account No. **50-1217** (Order No. **INTCP001**).

Respectfully submitted,



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